



# CONSUMERS' GUIDE

FEBRUARY 13, 1939



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**CONSUMERS** who bog down occasionally over the snail's pace forward their projects seem to make, should derive a wry satisfaction from a letter recently discovered under the eaves of the Capitol in a great cache of documents bearing on the activities of the United States when it was a very young Republic.

Dated August 3, 1810, and addressed to Albert Gallatin, Secretary of the Treasury, this newly discovered letter was signed by W. Ellery, Collector of Internal Revenue at the Port of Newport, R. I. It deals with the forgotten law, and incidentally refers patiently to a correspondence which persisted almost 20 years from 1792 to 1810.

Today's consumers could pick up the correspondence where it left off, and for the fun of it, refer to the previous communications in 1792, 1798, and 1810.

"Take a letter," a consumer might dictate, "March 13, 1939." Then going on, he could say, "Please refer to previous correspondence on September 24, 1792, December 20, 1798, March 18, 1800, April 17, 1802, and August 3, 1810."

The letter of 1810 reads:

Collectors Office  
Port of Newport  
August 3, 1810

Albert Gallatin, Esq.,  
Secretary of the Treasury.

Considering it to be of importance that there should be a common standard of weights and measures and a common mode of guaging throughout the United States, I wrote several letters to the Dept. of the Treasury on that subject, but I have not received any answer to either of them. The first was to Mr. Hamilton and was dated September 24, 1792. The second to Mr. Wolcott bears date Dec. 20th, 1798. At the close of a letter to Mr. Steele, Comm. of the Revenue dated March 1800, I expressed a hope that Congress would fix a standard for weights and measures and in a letter to him, then Compt. of the Treasury of April 17, 1802 I wrote thus, "In a letter to the Secy. of the Treas. of the 20th Dec. 1798, which I think was referred to you I mentioned the difference between the mode of guaging in this State and the State of New York, and pointed out the mode of guaging prescribed by a law of this State and added that a cask of 100 gallons guaged in New York will guage two gallons less than guaged here. What difference takes place in other States I don't know, but certainly the same mode of guaging and the same standard of weights and measures ought to be used in all."

By Sec. 21 of the Collection Law, "the Surveyor shall from time to time, particularly on the first Mon-

day in January and July in each year, examine and try the weights and measures and other instruments used in ascertaining the duties on imports and with standards to be provided by each Collector at the Public Expense for that purpose." If no standards are established by law, and there are none that I know of, how can the Collectors provide them? For want of such standards, our weights and measures are adjusted, by I believe, British Standards. How they are adjusted in other States I am not informed. There is no law of this State for that purpose, but there is an act of this State establishing a just and equal method of guaging in and throughout the same.

Permit me to add that until the United States shall have established a uniform standard of weights and measures, and a uniform method of guaging, an inequality will continue, disadvantageous to trade, and Commerce and probably to the revenue.

I am, with respect,

Sir,

Your obdt Servt.

W. Ellery, Coll.

Postscript: In 1831 the Treasury Department got around to one of Collector Ellery's recommendations and supplied all the customhouses with standard weights and measures.

The spirit of the patient collector marched a little further in 1836 when Congress authorized the Secretary of the Treasury to send a complete set of the standards used in the customhouses to the Governors of all the States. Thereafter most of the States adopted these standards legally.

In 1866 Congress passed a law making the use of the metric system legal.

But to this day the request of W. Ellery, Coll., made first in 1792 and repeated many times until 1810 has never been granted. There is still no law making one system of weights and measures mandatory throughout the United States in all the million and one transactions which are carried on in terms of weight or measure.

**TO BRIGHTEN** up the outside of a house experts recommend colored paints for blinds, window sashes, and casings. Good paints for this purpose are the trim and trellis paints, or exterior enamels. Stain won't do because it doesn't give enough protection to the woodwork.



## Shopping for Paint

*From the U. S. Forest Service come cautions and cues for consumers who are in search of values in paints*

**WHEN AUNT POLLY'S** fence had got its third coat of whitewash, Tom was rolling in wealth. He had acquired, according to Mark Twain's report, 12 marbles, part of a jew's-harp, a piece of blue bottle-glass to look through, a spool cannon, a key that wouldn't unlock anything, a fragment of chalk, a glass stopper of a decanter, a tin soldier, a couple of tadpoles, 6 firecrackers, a kitten with only one eye, a brass door knob, a dog collar—but no dog, the handle of a knife, 4 pieces of orange peel, and a dilapidated old window sash.

Brushwielders today who set

about painting their fences, their homes, their kitchens, or perhaps just an odd piece of furniture, cannot, of course, expect to acquire any such wealth.

What brushwielders can hope for, however, is to have whatever it is they are painting painted as thoroughly and as well as Aunt Polly's fence. Tom's problem in getting the kids to whitewash his fence was a simple one compared with the problem modern householders have in selecting the kind of paint they are to use.

How important the paint problem is to farmer-consumers, for example, is revealed by the aids which Federal and State agencies provide on this subject. Serious researchers can find references to the bulletins of these agencies in the *Consumers' Bookshelf*, on sale by the Superintendent of Documents, Washington, D. C., for 15 cents.

If they want to slap a little paint

on their fences, consumers today have to consider, besides whitewash, the relative advantages of exterior casein paint, emulsion paint, creosote paint, barn paint, cheap house paint, quick drying house paint, enamelled house paint, ordinary house paint, and perhaps a hundred and one brands of each of these.

**BEGINNING** with the consumer end of the paint problem, paints can be classified according to what they are to be used for. For exteriors, there are house and barn paints to apply to important surfaces like siding and shingles. Trim and trellis paints, or exterior enamels, find their proper use on the less important blinds, window sashes, and casings. Porch and deck paints give hard surfaces that stand up under mechanical wear and weathering. Shingle stains naturally are used for shingles but also for other rough woodwork where a color that does



**4** not entirely conceal the wood is desired. Spar varnish, named for its suitability for masts and spars of ships, supplies the land-lubber's need for a coating for the front door or for an exterior coating that protects and yet shows the wood. Metal, brick, and concrete all have their special paints.

Interior surfaces similarly have paints that meet specific requirements. For use on plaster and wall-boards there are wall paints—gloss, semi-gloss, and flat. Where a less expensive paint is desired, casein paints and calcimines are useful for these surfaces. Plastic paints are available to make textured surfaces.

**FARM** fences, chicken houses, and the interior walls of city homes are served equally well by cold water paints, which are less elegantly known sometimes as whitewash. Colored with earth pigments, they are cheap and effective paints for many purposes. Information about making the paint at home can be secured from the Department of Agriculture's Bulletin 1452, *Painting on the Farm*, for 5 cents in cash from the Superintendent of Documents, Washington, D. C.



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Consumers who are sensitive to noise can get sound-deadening acoustic paint. For interior trim there are architectural paints, enamels, and varnishes. For floors there are floor paints, floor varnishes, floor seals, floor oils, and floor waxes.

**FIRST LESSON** in the consumer's paint textbook is to use paints for the purposes for which they are intended. Most paint labels tell what the paints are made for. To disregard the manufacturer's advice in this is to invite trouble. An excellent house paint may be unsuitable for an interior wall or ceiling and a fine interior enamel is likely to prove disastrous on the outside of a front door.

Paints with overboastful labels and advertising, claiming superlative merit for practically all kinds of service, should be regarded with suspicion. The jack-of-all-trades is usually master of none. It is safer to stick to paints that are recommended for specific purposes, and the more specific the better.

On the edge of the paint and varnish business, too, there are concerns that sell concoctions to be added to paints which claim to make them go farther, last longer, and wear better. A good rule to follow here is to add nothing to a paint but what the manufacturer recommends on the label. Then if the paint turns out to be a poor one the consumer can complain to his paint dealer with a clear conscience.

**HOUSE PAINTS** for exterior woodwork seem to prove most bewildering to consumers. This is partly because severe exposure reveals the shortcomings of poor paint, and partly because there are so many different kinds of house paint, each said to be better than any other. There are several important elements of a good paint, but superiority in any one of them must often be gained at the expense of inferiority in some of the others.

Selection of house paint is further complicated by the fact that worn out coatings cannot be removed

easily and inexpensively. Instead, new paint usually must be applied over the old. As a rule it is always safest to have each job done with the same kind of paint because the behavior of the new coat often depends upon what kind of paint was used for the old one.

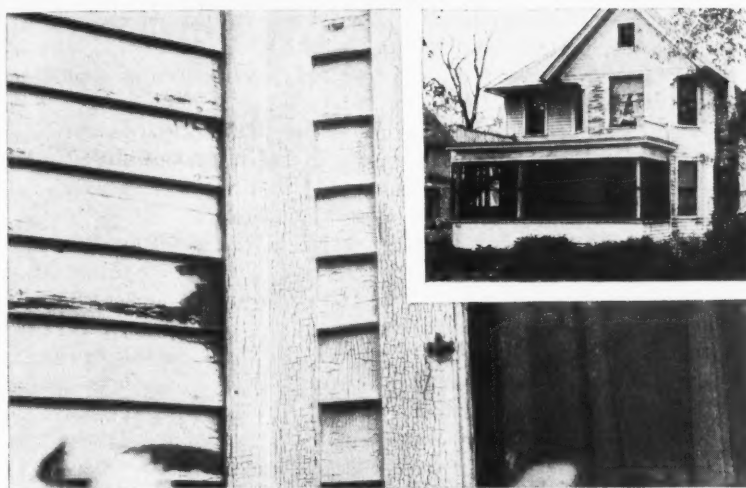
Choosing between paint in the paste or in the prepared form presents problems. Paste paint is concentrated paint that must be thinned with a good deal of liquid before it is ready to apply. Prepared paint is ready to apply as a finish paint as soon as it is stirred thoroughly. A gallon of prepared paint very likely will contain one-fourth gallon of pigments, five-eighths gallon of linseed oil, and one-eighth gallon of volatile thinner (mineral spirits or turpentine), and a drier. On the other hand, a gallon of paste paint should contain a full half gallon of pigments and a half gallon of linseed oil.

When paste paints do come up to this standard the way to thin them is to pour the paste first into a larger container. Then for each gallon of paste three-fourths of a gallon of linseed oil should be stirred into the mixture and one-fourth gallon of turpentine together with a drier, if the paste does not already contain a drier. This stirs up to 2 gallons.

**EXPERIENCED PAINTERS** prefer paste paints because with them they can mix more suitable undercoats than they can with prepared paints. To mix the undercoat, which is the second of the three coats recommended for new woodwork and the first of the two coats advised for painting over old paint, experienced painters thin a gallon of the standard paste with a fourth to a half gallon of linseed oil and from a half to a fourth gallon of turpentine and drier.

Paste paints, however, have two disadvantages. As a rule, they come only in white and consequently the consumer must tint them himself if he wants cream, gray, buff, light brown, or light green. This is done by adding small amounts of colors-in-oil. But skillful tinting, par-





**THIS HOUSE** is 45 years old. The present owner has had it painted seven times in the last 26 years and in that time has spent about \$2,000 for painting the exterior, yet none of the paint jobs has gone more than a year or so without bad cracking and scaling. The condition gets worse with each repainting. In its early years the house was successively painted yellow, gray, dark brown, and dark green. In more recent years it has been kept painted with white or tinted white paints but with a different type of paint each time—a practice experts caution against.

ticularly the matching of colors, is an art. If inexperienced painters try their hand at it, despite the hazard, they should remember to tint enough paint in the first batch to complete the job. If they don't, the chances are they will never be able to match the color of the first mix.

Second objection to paste paints is the lack of commercial standards for them. In the case of white lead paste, however, commercial practice is so standardized that consumers can be sure they will get a paste that contains at least 50-percent white lead pigment. The other commercial paste paints sometimes contain as little as one-third of a gallon of pigments in a gallon of paste. Yet the directions accompanying them advise consumers to use the same proportions of linseed oil and turpentine that they would use with white lead paste. For this reason, until there are suitable standards for the other commercial paste paints, consumers should stick to white lead where paste is what they want. Otherwise, they are well advised to skip the paste paints altogether and use a prepared paint.

On the basis of color, paints are

divided into white paints, tinted paints, and colored pigment paints. Color, of course, is important in itself, but in addition it is an index, within certain limits, of the composition of the paint. White paints can contain no appreciable amount of colored pigments.

A MANUFACTURER'S BRAND of prepared paints consists in general of one white paint, as many as 2 dozen tinted paints, and 8 or 10 colored pigment paints. Paints of the same brand may use the same paint for the white paint and the tinted paints, except for the addition of colored pigments in the tints. More often, however, the white paint and the tinted and colored paints are totally different in composition. Since general advice about brands is often based on consideration of the white paint only, consumers should remember that the tinted and colored paints of a particular brand may be entirely unrelated to the white paint.

Colored pigment paints are often exceedingly durable. The important colored pigments, such as iron oxide and carbon, however, have no

hardening effect on linseed oil and for that reason make soft coatings. Such paints tend to dry slowly in poor weather, and when recoated they sometimes give trouble that even chemists do not understand very well.

To avoid these difficulties, consumers should look for boiled oil or varnish in these paints.

For painting homes, the present tendency is to use colored pigment paints chiefly for such surfaces as sash, trim, and blinds, to furnish contrast with white or tinted paint on the body of the house. Where the body of the house is to be dark in color, and protection isn't so important as the decorative effect, shingle stain can be used sometimes but paint would still be needed for the sash and trim which require more protection from the weather than can be provided with stain.

THREE KINDS of white pigments are used in most paints. They are the chemically active pigments, the inactive pigments that have hiding power or opacity, and the transparent pigments.

Chemically active pigments are necessary in white and tinted paints because the reaction between these pigments and acids in the drying oils plays an important part in making good, durable paint. White paints made only of inactive pigments would last only a short time. There is, however, a new and expensive pigment, lead titanate, which is inactive and yet makes durable paint. It is ivory in color, rather than white.

Basic carbonate white lead, basic sulfate white lead, zinc oxide, and the leaded zinc oxides are the chemically active white pigments.

White lead pigments make paints that are soft and wear slowly without curling up at the edges of cracks.

Zinc oxide pigments by themselves make hard paint coatings that wear away very slowly but crack badly and curl up at the edges and flake off if they go too long without redoing.

There are 2 groups of chemically

**6** inactive opaque pigments. They are the titanium pigments and the zinc sulfide pigments (lithopone). Transparent pigments, most of which are chemically inactive, do not give paint its essential hiding power. The most important ones are silica, magnesium silicate, calcium carbonate (whiting, chalk), barium sulfate (barytes, blanc fixe), and kaolin (white china clay). Inexpensive, they are used legitimately to give greater volume of pigment at low cost, but used to excess they become adulterants. Unfortunately there is no simple rule to give consumers for telling where legitimate use ends and adulteration begins. It's a matter of cost versus durability.

REPORTS by the Forest Service of the Department of Agriculture show that an important index to the serviceableness of a paint is the total pigment content. Most house paints serve best, experts from this agency say, when, in the finish coat the total pigment is between 27 and 32 percent by volume of the nonvolatile matter (pigment plus drying oils), or roughly about 71 percent by weight and in the undercoat between 35 and 40 percent or, roughly again, about 80 percent by weight.

No less important in a paint than the pigment is the liquid in which the pigments are suspended. This liquid in white and tinted paints consists of drying oil, volatile thinner, and drier. The drying oil is usually linseed oil, but suitable drying oils may also be made by mixing soybean oil or perilla oil with the linseed oil. In house paints the drying oil is usually either raw or boiled.

Bodied oil is added to paints sometimes to control the paint consistency. Too much of it gives the paint certain enamel qualities that make paint difficult to apply properly.

Tung oil is useful in white or tinted paints only in combination with other oils and then only in relatively moderate amounts.

The percentage of volatile thinner in paint gives warning to consumers

when there is too much bodied oil in the vehicle. When the volatile thinner amounts to more than 15 percent of the liquid part of the paint by weight, consumers are receiving a clear signal to watch out. Conversely no less than 85 percent of the liquid part of the paint by weight should be drying oil; that is, linseed oil with perhaps a small admixture of tung, perilla, or soybean oil.

Volatile thinners, whose function in a paint is to dilute it so that it spreads easily, evaporate after the paint is applied. Hence the volatile in their name. For this purpose most paint makers use the petroleum products, mineral spirits, and varnish and paint makers' naphtha. For consumers, however, the safest paint thinner is turpentine. Water, which is sometimes used for this purpose in soapy solution, serves the purpose badly and has no proper place in a paint.

PAINT IDENTIFICATION depends upon the consumer's ability to interpret the complicated statement of composition, or formula, often printed on the label. A number of States, following the lead of North Dakota, require all house paint sold within them to reveal their formulas on the label.

Indicating, however, that some consumers who want informative labeling have not been shouting from the housetops for nothing, the National Paint, Varnish, and Lacquer Association at its convention last year passed a resolution urging the paint industry "in consideration of the interests of consumers of paint products" to adopt formula labeling for most of the paints consumers buy.

Acting upon the resolution, the association soon afterward released a publication in which it indicated the kind of formula labeling it thought desirable.

In this pamphlet recommended standards of identity are defined for each paint ingredient. One of these definitions in particular will be of interest to consumers. "Water," the association said, "is the only word" that should be used to de-

scribe water. Do not use "aqua," "moisture," "emulsion," "emulsified oil," or "any other term than water."

Under the association's recommendation the composition of paints would be given by the weight of each ingredient.

This resolution and the recommendations for putting it into effect are a step forward. Better still there may even be paint labels in store for consumers which tell all in simple, non-technical language that can be understood by all. What most consumers want is a paint label which says that this paint is excellent, fair, or good for particular purposes.

TACKLING the complex problem of securing informative labeling for paint consumers, the Forest Products Laboratory of the United States Forest Service has finally worked out a practicable method of paint identification which answers the question consumers ask most frequently about paints, "Which one shall I use?" After studying the paint problems that have puzzled consumers for years, it is now proposing a classification of house paints by type and division, much as lumber has long been classified for sale by species and the species subdivided into grades.

The unfamiliar and technical-looking types for paints recommended by the Forest Service are in fact neither technical nor difficult. Arranged in five classes they enable every consumer to buy the kind of paint he needs to meet his purposes. Under the classification system the most important types of white or tinted house paints of high quality would be:

**Type L:** The pigment consists entirely of white lead except for the additions of colored pigments to make the tinted paints. This paint, if used exclusively, remains the best choice for house owners who wish to allow very long intervals, longer than the durability of any other white or tinted paint, to elapse between paint jobs. When worn

[Continued on page 19]

# Checking on Pop

## *Some questions and answers about a favorite thirst quencher*



**IN THE SPRING** a young consumer's fancy gaily turns to thoughts of pop. Soft-drink making has become a major enterprise. There are over 6,000 bottling plants engaged in preparing approximately 13 billion half pints of carbonated beverages a year. So important a product, refreshing alike to juniors and seniors, rates discriminating and intelligent consumers.

First rule in buying soft drinks—or any other product for that matter—is to read the label. A name—maybe a trade name that only slightly suggests the ingredients of the product itself—the number of ounces, the flavor, may be all that appear on a label. Even this identification is sometimes missing after bottles have cooled in an ice box. Caps often give sparsely worded facts about contents. Careful consumers look at both cap and label. Federal labeling laws frequently do not reach through to the bottle of soft drink. Later on, we will explain why. There are no Federal laws requiring content facts to be told in advertisements of soft drinks, but the Federal Trade Commission can proceed against firms advertising in a false or misleading way about their beverages under the provisions of the Wheeler-Lea Act.

When manufacturers of soft drinks claim for their products a refreshing moment in an exhausting day, most consumers will agree. Depending

on the product, they may even claim some food value for their beverage. Of course people wise in nutrition facts know that the best source of vim, vigor, and health is a well-balanced diet of wholesome foods. Soft drinks, nevertheless, fill a role both as thirst quenchers and, if made out of wholesome materials, as a source of a small amount of food value, too.

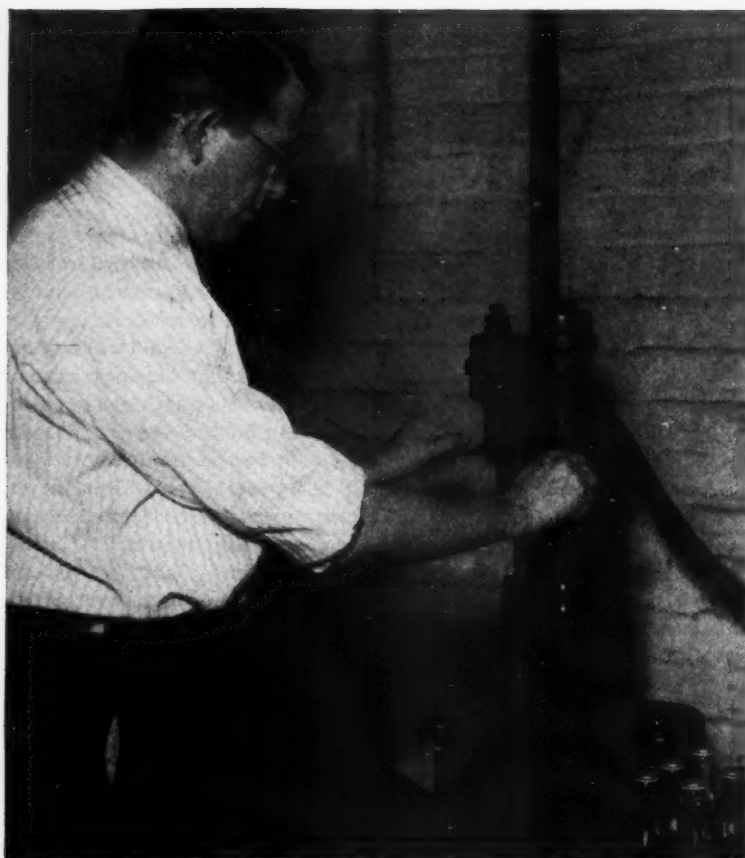
**SUGAR IN SOME FORM** is present in all soft drinks. As a form of concentrated energy, sugar rates next to fat. It is more easily digested than any other food and is a quick source of energy. Because it blunts the appetite for other foods, however, it should come at the end of a meal, and the smart consumer holds down on the temptation to consume too much between meals.

Food values of soft drinks can be measured almost entirely in terms of the amount of sugar they contain. Laboratory tests of 1,600 samples made for the bottlers' trade association showed that the sugar content of non-acid beverages—such as sarsaparilla, birch beer, cream soda, and root beer—ranged from 9.65 to 11.33 percent. Citrus fruit beverages ranged from 9.18 to 13.25 percent sugar. Non-citrus fruit beverages had from 10.55 to 13.51 percent sugar content. Least sweet of the various types tested was pale-dry ginger ale with 8.63 percent; sweetest, was ginger beer with 13.92 percent sugar.

An average bottle of pop, it seems agreed, contains about 11 percent sweetening. This means some 85 to 90 calories in the usual 6½-ounce bottle.

**CONSUMER** education of boys and girls can start with learning what to look for on the labels of this popular item in young consumers' purchases.





**TO PROTECT** both consumers and careful bottlers, Food and Drug Administration experts test soft drinks sold across State lines when they have reason to think the drinks are contaminated or adulterated.

Whether a soft drink has any other nutrient besides sugar depends on its flavoring base. If the beverage is made with true fruit juice, there may be a chance to get at least a whiff of vitamins. Oranges, lemons, grapefruit are all good sources of Vitamin C. In fact, citrus fruits lead the fruit list for this vitamin, followed by the berry family. The vitamin value of a fruit drink depends, however, not only on the kind and the amount of real fruit there is in the drink, but upon the treatment of the juice in the process of manufacturing the bottled beverage. Vitamin C is easily destroyed by heat or by the oxygen of the air. Unless very special precautions are taken, therefore, the bottled product will contain little or no Vitamin C even though real fruit juice may be an ingredient. Hence, it is a good rule not to rely

on pop bottles for your Vitamin C.

The fact that a drink is named after a fresh fruit is not a guarantee that the drink contains the juice of that fruit. In fact, if it is pop that you buy, the odds are in favor of your getting sweetened water flavored either with an imitation flavor made from some coal-tar derivative or with a fresh fruit concentrate which has long since lost the vitamin values of the original fruit.

According to the Federal Food and Drug regulations, any beverage labeled fruit juice must be "the unfermented liquid obtained from the first pressing of sound fresh fruit or its pulp." No water may be added and if sugar is added, its presence must be stated on the label.

FRUIT is a highly perishable food. Some processors, in order to prevent

fruit juice from spoiling, pasteurize it or use one or two preservatives. Federal Food and Drug regulations state clearly that "while the use of chemical preservatives in beverages or other foods is not recommended or encouraged, benzoate of soda may be used, provided both the presence and amount of it are plainly declared in the labeling and sulphur dioxide may be used in ordinary quantities provided its presence is plainly declared in the labeling." This, remember, describes fruit juice, not pop.

A fruit drink becomes an ade, a squash, a punch, a smash, or a crush when the juice is diluted with still or carbonated water. The amount of actual juice used depends on the recipe used by the maker. Most home-makers of lemonade and of orangeade probably figure from half to three-quarters of a lemon or orange to a glass of water. Many of the commercially prepared drinks of the "ade" type use less juice. Their taste, which may be similar to that of fresh fruit ade, is due to the use of tartaric acid, which is found in grapes, or citric acid, which is derived from lemon pulp or is made by a biological process from sugar. To this is added artificial color simulating the complexion of the fruit after which the product is named.

**TO CONFORM** with Federal regulations for products sold across State lines, the label of a beverage containing these ingredients should state "added fruit acid" and "artificial color," or "certified color added." Harmless certified coal-tar dyes may be used legally in beverages and other foods, provided their use does not result in concealing damage or inferiority and provided their presence is declared on the label. The statement "Certified Color Added" means that the particular batch of dye from which the color has been taken has been examined by the chemists of the Food and Drug Administration.

Under the Food, Drug, and Cosmetic Act of 1938 no coal-tar dye may be used in a food or beverage sold in



interstate commerce unless it is a certified coal-tar color. Defenses against the use of unsafe coal-tar dyes in intrastate commerce beverages depend upon State laws.

**RASPBERRY, STRAWBERRY,** and other flavored sodas and pops, the invariable companion of every baseball game and carnival, are usually "imitation fruit beverages." Sometimes a small portion of true fruit flavor is used in them, but the chief ingredients in their beverage bases are sugar, sirup, synthetic flavors, fruit acids, and artificial color. In the case of lemon pops or other citrus beverages of this type, the flavor is sometimes derived from the peel of the fruit. Synthetic flavors and fruit acids do not rate as vitamin sources.

Ginger ale, root beer, soda water, sarsaparilla, birch beer, cream soda water are among the many popular carbonated drinks of the non-fruit type. Manufacturers have different formulas for making these drinks.

A ginger ale may be "pale" or "golden" depending on the amount of sugar and caramel color used—but all of them, if sold so as to be subject to Food and Drug regulations, must be made from ginger ale flavor in which the ginger spice is the essential constituent.

Principal ingredients used in birch beer, sarsaparilla, and root beer are the same. Oil of sassafras and methyl salicylate—or in place of the latter, oil of wintergreen or oil of sweet birch—are used. The proportions of these ingredients and the addition of other spices give the drink its predominant flavor. These flavoring substances are present in such small amounts that their food or medicinal importance is insignificant.

**THESE REGULATIONS** which describe what a food must contain to be called by a certain name are known as standards of identity. The definitions listed were issued under the old Food and Drugs Act. Now under the new Food, Drug, and Cosmetic Act, foods and beverages which wander across State lines must

conform to the standards of identity which from time to time will be promulgated by the Department of Agriculture, or else they must list all of their ingredients on their labels. Beverages which stick within the confines of a single State do not come under these provisions.

Effervescing bubbles in a soft drink are due to carbon dioxide gas which under pressure has been instilled into the water. Carbon dioxide in carbonated water is completely harmless and should not be confused with its poisonous chemical relative, carbon monoxide.

When the boast is made that a soft drink is "bracing" or will give one a "pick-up," the stimulating effect of the non-alcoholic drink may be due to the presence of caffeine, the same stimulant found in coffee and tea. To some people the presence of caffeine in a drink is desirable; others may prefer to limit their soft drinks to those which do not have this stimulant.

**CAN THE CONSUMER** tell whether the drink he buys from the park vendor or the stand near the athletic field contains caffeine or not? It depends on the food and drug law in

the State in which he buys the drink. Federal Food and Drug regulations require that the presence of caffeine be stated on labels of bottled drinks or beverage bases which are shipped interstate. However, the greatest percentage of bottled drinks are mixed and bottled in the State in which they are sold.

Beverage bases, manufactured by makers of flavors located in one State, are often bought by bottling plants located in another State, but the drinks themselves may be made and sold within the same State. Whether information as to caffeine content in the beverage base finds its way to the label on a bottle depends on the State labeling laws. The same principle holds true for label declarations of other beverage ingredients. In one State, a beverage containing some juice from fresh grapes with fruit acid added may be called a grape drink. In another, the presence of fruit acid must be stated on the label. Since Federal Food and Drug regulations do not always carry through to the labels on bottled drinks sold within a State it would be of interest for consumers to check their State laws with the Federal Food and Drug Law.

## "Let the Buyer Beware"

### *New York consumers get weekly tips from their Weights and Measures Bureau*

**FROM** New York City's Department of Markets comes another lead which may be of use to those in other cities who are working for honest weights and measures. Consumers need to know what their rights are, and what to do if they suspect their rights are being violated. New York City's Weights and Measures Bureau chief tells them. Over the municipal broadcasting station, every Saturday morning from 8:15 to 8:30, he takes up one aspect of the weights and measures problem.

First time it was a general introduction to the consumer's stake in weights and measures enforcement. Coal was the second subject, and spe-

cific information was given coal buyers so they could make sure they were getting every ton they paid for.

The Saturday morning programs go by the general title of "Let the Buyer Beware." They seek to revise that time-worn slogan in the direction of "Let the Seller Beware."

"By exposing weights and measures practices that cheat the buyer," say New York officials, "we not only further stretch the purchasing power of the consumer's dollar, but also eliminate unfair competition for the honest seller." The series ties in with the five-mornings-a-week talks on the best food buys of the day also given by the city's Department of Markets.



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## *How Government helps destitute farm families climb up the ladder to safer and surer living*

**VISIT**<sup>1</sup> any one of the 650,000 rural families who are being "rehabilitated" with the help of small Federal loans. You can find them in almost every county in the country where there is land to be tilled, north, south, east, or west. Ask them what has been most important in helping them "get on their feet." The first thing they will probably show you will be the cellar storeroom where there are stored quarts and quarts of canned vegetables and fruits, and bushels of potatoes, apples, dried beans, and other foods. Then they will take you outside and point—if you've arrived at the right season—to the "backyard" garden, covering a half or a whole acre, and filled with growing vegetables and fruits.

"Got it all from there," might be the typical comment of a rural consumer turned producer. "Raised \$300 worth of food on it last year. Hardly had to buy anything."

**RURAL REHABILITATION** families do well to point with pride. A few years ago most of these families were destitute, trying to eke out a living on barren land, existing as best they could, in urgent need of food and clothing. Depression alone was not responsible for their plight. Prosperity for many of them had been "just around the corner" since early in the post-war days. Chief causes of their poverty, Secretary of Agriculture Wallace told a special Senate

committee last year, were "a prolonged period of ruinous farm prices, careless and unscientific tillage practices, unsound tenure systems, a heavy burden of debt, inadequate acreage, and a long-continued wastage of our farming capital by soil erosion."

Their markets gone, their farms refusing to produce, grasshoppers and drought taking a dreadful toll in the "dust bowl" of the Midwest, most of those farm families saw little hope in the future. Some took to the road, became "migratory workers," going from State to State in ramshackle old cars looking for a few weeks' work here or a temporary job there. Others—their farms foreclosed—became tenant farmers or sharecroppers "until something better would come along." Such a Micawber-like outlook did little to put the future on a paying basis.

In 1933 there were more than 1,000,000 such destitute farm families in urgent need of aid. They represented over 5,000,000 of the country's population. In 1935-36, about one out of every 11 farm families received direct relief at some time during the year, according to the Consumer Purchases Study (see *Consumers' Guide*, Vol. V, No. 8, September 1938). A Federal report issued last year estimated that a half-million farms were "on land so poor that it will literally starve the families living on it if they continue to try to make a living by farming it."

**ECONOMIC FRONTIERS**, unlike geographic frontiers, are man-made. On the opportunity to produce depends the ability of these millions of rural families to consume. Until they can again live off the land, they

are like broken gears in the Nation's economic machinery. Economically they represent tremendous costs.

When the Federal Government stepped into the picture, its first problem was to rehabilitate the hundreds of thousands of farm families who had reached absolute bottom in the economic scale. These families, by all ordinary standards, were credit risks of the worst sort. Bankers could not lend them money for the simple reason that they had no assets, and no guarantees of repayment. But the Government—faced with the tremendous cost of supporting the millions of families with relief payments—embarked on a program of lending them a few hundred dollars each to set them on their feet again. With security consisting mostly of "human equity," these "character loans" have averaged about \$300 to each family. Carrying a 5-percent interest rate, loans are repayable over a period of from 1 to 5 years. Few of the loans thus far have been crossed off Federal ledgers as "bad debts."

**WITH THE LOAN** goes the obligation to "make good." A family agrees to follow sound farm methods and home management plans to prove its right to rehabilitation help.

By scientific planning, families are able to look to the future with more

**SUBSISTENCE** gardens are planned to meet as nearly as possible the year-round dietary needs of the family. It's a job for all the family, with everyone doing his share. The California family pictured on the opposite page raises three-quarters of its food supply on its acre of land.





**12** confidence. County agents, representatives of State agricultural colleges, and representatives of the Farm Security Administration all cooperate in setting up individual farm family programs, working with destitute families to encourage them to make the most out of what they have, and continually offering help and advice.

Basic to most of the plans is the development of a backyard garden. An acre or a half acre of land is set aside for the raising of enough vegetables and fruits for the family's own subsistence. It is important to rehabilitate physically as well as economically. A balanced, well-planned diet is something which many of these families had never had.

BEFORE A LOAN is granted, a Farm Security Administration county supervisor visits the farm, looks over the land and condition of buildings and equipment, and goes over the complete family situation. Then together they work out a farm and home plan on the basis of which a loan may be made. If the loan is granted, the supervisor and the county agent both regularly visit the family to check their progress and give what help is needed.

In deciding on a garden the Farm Security Administration representative or county agent, with the family head, looks over the farm land, judges the soil, studies local charts showing crop cycles in that particular area. They talk over the nutritional needs of the family based on the number of children and the diet standards that should be met. Diet standards, for the first time in the memory of many of these families, are based on scientific standards drawn up by researchers in the Bureau of Home Economics in the Department of Agriculture.

Bending over the chart, the farmer, his wife, the older children perhaps, and the farm supervisor map out an outline for the garden to insure a complete "long-season" supply of fresh vegetables and fruits, with enough over to store or can for the winter months. In front of them is



**FAMILIES** granted rehabilitation loans from the Federal Government must agree to live up to farm and home plans mapped out for them. Home plans always call for a subsistence garden from which the family gets its fresh fruits and vegetables, with enough left over for storage and canning.

a form suggested by the Farm Security Administration. Knowing where the family diet is shy, knowing the amount and quality of land available for the garden, it is an easy matter, with such expert help, to decide on a garden program that will most nearly meet the family needs in terms of vitamins and nutrition.

Varieties and quantities of crops to be grown, seed to be planted, the average expected yield based on past records for the area, planting dates, "normal harvest periods"—all are worked out and carefully recorded as a guide to the needy family. That done, the chart is tacked up on the kitchen wall, and the family has available for ready reference its food needs and resources for the whole year.

**KNOWING** how much of each product is needed and the amount that was to be planted, the next job is to space food supplies so they are available the year around. Eating fresh green vegetables 6 months of the year and starchy foods the other 6

months doesn't leave a family well off nutritionally. The Department of Agriculture helps again with another chart to guide a farm family in outlining its own "seasonal distribution of fresh and stored farm-produced foods." With that chart they can tell at a glance how many months of the year vegetables will be available in the garden, how many plantings should be made of different varieties, how many months the family can expect storage vegetables will keep, and what vegetables have to be canned in order to insure a year-round supply.

**SIMPLE** in their outlines, such plans have behind them sound scientific research based on experiments undertaken by the State agricultural colleges. Few families have difficulty in understanding the charts, and being farmers, they have little trouble in following definite planting and harvesting schedules. Having a farm plan hinged to a family-diet plan is something new, exciting,



and challenging. For many years these destitute families have seen the ravages of scurvy, pellagra, and other diseases that follow in the wake of diets that rarely include fresh vegetables or fruits at the dinner table. With schedules that carry through, from soil to supper, they have at last a chance to build the foundations both of good health and economic independence.

Results of this program of "garden crops" have been one of the major successes of the farm rehabilitation plan. Not only have subsistence gardens been set up on rehabilitation farms; they have been made an integral part of community farms, resettlement projects for part-time industrial workers, and on farms bought outright by families with the aid of long-term Government loans.

A SURVEY of 250,000 rehabilitation families who had subsistence gardens in 1937 showed that they processed a total of 65,000,000 quarts of fruits and vegetables alone, as against some 25,000,000 quarts before they undertook a home management plan. The number of quarts canned per person increased from 21 to 53. These figures do not tell the supply of fresh fruits and vegetables taken from the garden or stored for winter use. Final figures for last year are still being computed, but already they show very large increases over the 1937 record.

Reports of farm and home supervisors in the field have been more dramatic barometers of the program's success. Their files abound with statements like these: "As a result of concerted efforts to produce and conserve foods of good nutritional value, rehabilitation families are enjoying improved health." "Some of the families exchange produce to enable them to better balance their food supply." "Because of the garden and canning program, grant needs have been largely confined to clothing and emergency medical care." "The whole family cooperates in raising a garden." "The grocery bill of the T— family for

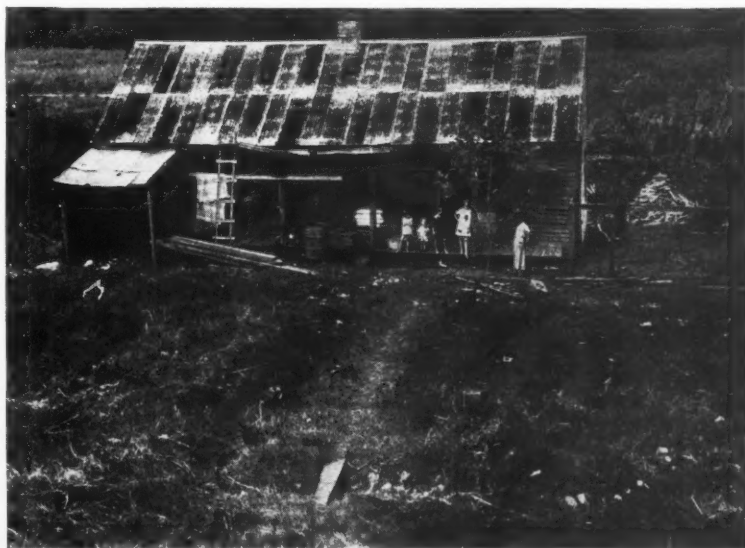
one typical month, ran about \$7 and \$1.50 of this was for ice. This family is indeed making the farm feed the family." "The food supply of the H— family was very inadequate in 1936, but they were supplied with a pressure cooker and sufficient jars to can 80 quarts per person this year." "When the O— family came to our attention in the spring of 1935 their net worth was \$150. Now health has greatly improved and a more nutritious diet is being followed. A song or jest can now be heard where before only growls or complaints could be heard. Mrs. O— said: 'I wouldn't take \$100 for my pressure cooker and what it has contributed to my family and do without it.' And Mr. O— said: 'My health is better. I do not know what my family and I would have done had the Government not helped us when we were most in need. It is quite a satisfaction to know this winter we have cellar to go to a filled with a variety of food. We no longer need to ask for a grant.'"

FARM FAMILIES anxious to put their own subsistence garden into op-

eration don't have to get in debt to the Federal Government to do it. In many counties, county agents and home demonstration agents are on hand to help members map out a garden plan that meets diet needs.

Families "up against it" and in desperate need of assistance, should go to the office of the local Farm Security Administration county supervisor. Their local banker or merchant or county agent will tell them how to contact the F. S. A. representative. The supervisor will sit down with them, get acquainted in a spirit of good neighborliness, see whether a plan can be worked out to pay off debts, buy new supplies, and avoid relief status with a "rehabilitation loan." But before the loan is granted, the family's needs and past record will be investigated, its reputation and standing in the community measured, and an estimate made of its sincerity and willingness to put the farm on a paying basis and eventually to wipe out the loan. Preliminary to a loan, too, is the setting up of a complete farm and home plan that will give the family a head-start against failure.

**NOT ALL SLUM** areas are in the city. Eradicating the hundreds of thousands of "rural slums" is a major job of the Federal Government. First step is to teach handicapped farm families to supplement meager incomes with their own home-grown food supplies planned on a year-round basis.



**14** **RATES** of interest, as well as money cost of credit, are facts the family must have to decide questions like these: In which store will instalment credit cost us least? Shall we buy on the instalment plan, or borrow the money and pay cash? How much will we gain if we can use savings and pay cash for the merchandise? If we're going to buy both items, should we buy the radio on time and pay cash for the refrigerator, or will it be cheaper to get the radio for cash and the refrigerator on time?



## Buying on Time

*Instalment purchasing leads consumers into a maze of higher mathematics, but for those who must borrow to consume, here's one rule to help in computing credit costs*

"IT'S AS SIMPLE as A, B, C," was the way a leading sales finance company announced its automobile instalment plan. "Take the unpaid balance, add the cost of insurance, and multiply by 6 percent." But, the announcement confided, "this is not 6-percent interest, but a convenient multiplier which anyone can use and understand."

This attempt to teach consumers a new instalment arithmetic, said the Federal Trade Commission, constituted an unfair trade practice. Far from being something anyone could use and understand, it was downright misleading.

The consumer was left to figure out the A, B, C's of instalment credit for himself, but the Commission sought to take him out of the happy never-never land of "6 percent."

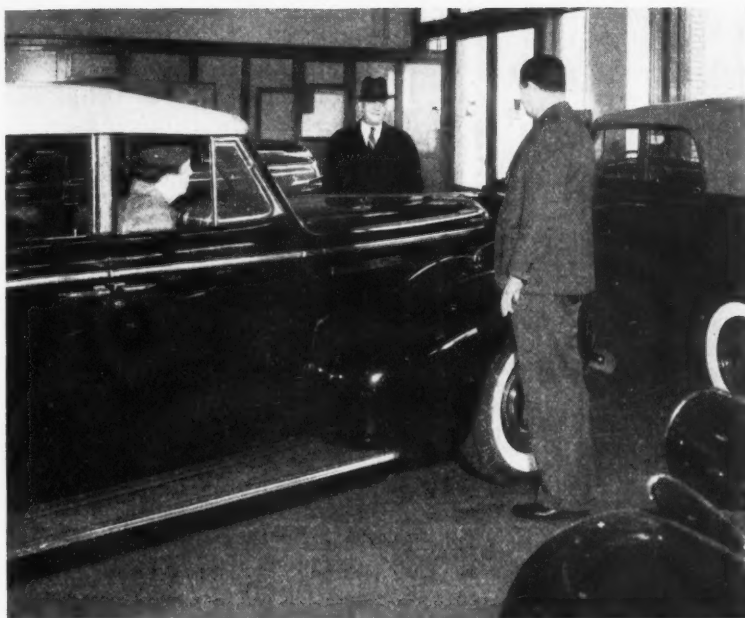
It is important that consumers be able to figure out just how much the privilege of "pay-as-you-use" buying

costs them. Consumers buy about  $4\frac{1}{2}$  billion dollars' worth of goods on the instalment plan each year. Only retail charge accounts are a larger source of consumer credit, and that for a shorter period of time. As we have seen in a previous article ("Selling Credit to Consumers," *Consumers' Guide*, January 30, 1939), consumers borrowed cash sums totaling about  $1\frac{1}{2}$  billion dollars in 1936 from credit unions, personal finance companies, industrial banks, personal loan departments of commercial banks, pawnbrokers, remedial loan societies, and loan sharks. But instalment buying is the kind of credit that—with the possible exception of retail charge accounts—touches American individuals, American families most closely.

BUYING ON TIME includes borrowing the use of money. When the

consumer proposes to buy on the instalment plan, he is shopping not only for the automobile or the suite of furniture, but for credit. He does not think of it that way as a rule but he is in the market for a loan, just as much as if he went to a bank or personal finance company, or his credit union, to borrow money so as to pay cash for the goods. In fact, he has the alternative of borrowing cash. On the other hand, many cash loans are made solely to refinance instalment payments.

Between cash loans and instalment credit—said the Committee on Consumer Credit in its report to the governor of Massachusetts—"the similarities are more important than the dissimilarities. The two types of credit use similar techniques, sometimes rely upon the same security, and fall back to some extent upon the same remedies. Whether instalment sales do or do not involve



'loans' is beside the point. Whether the amount due on unpaid balances is called 'interest' or 'carrying charges' or a 'price differential' is also beside the point. Both money debts and merchandise debts impose a financial burden upon the consumer and expose him to exploitation and abuse. The most significant difference—freedom of action—tends to disappear once the consumer has entered into the contract; for, having committed himself, the consumer often becomes as heavily burdened by an instalment contract as by a money debt."

A legal distinction between an instalment sale and a cash loan has been urged by attorneys for dealers and sales finance companies, and has generally been sustained by the courts. Long ago, the courts held that usury law restrictions on interest rates did not apply to the extra charge for credit on a sale of goods, as long as that charge was not stated as "interest." Economists, however, have tended to differ with this legal interpretation; and commonsense consumers have said it's credit no matter how thin you slice it.

"From a common sense point of view," said a committee of the Wisconsin State legislature which re-

cently investigated automobile instalment buying, "all of these merchandise sales transactions which obligate the buyer to make a series of monthly payments, placing him in exactly the same position as though he had borrowed cash, should be classified as loans and not as sales."

From the investigation it had made, the Committee felt called upon to add that the "additional price charged for deferred payments on merchandise makes these transactions in effect loans and not sales, and that due to concealment of charges and evasion of the usury laws, the charge for this credit is sometimes so exorbitant that the consumer would be better off had he not purchased the merchandise."

Used-car dealers, for example, insisted in hearings before the Wisconsin committee that, while they sold their cars on time, cash and instalment prices were the same, and there were no carrying charges. Said the committee: "The finance charge is concealed in the sales price."

Under this arrangement, a cash customer who pays the same price as the instalment buyer pays a finance charge without even getting credit.

HALF OF ALL RETAILERS grant

**DISGUISED** interest rates characterize many cash loan transactions and most instalment sales, but consumers must take part of the blame as long as they fail to demand the facts.

credit to their customers. About 1 dollar out of every 3 dollars' worth of retail sales is on a credit basis—either a charge or an instalment sale. Every type of merchandise on the retail market can be bought, somewhere, on credit.

How much does instalment credit cost? This is where the consumer, beginning to investigate possible sources of credit, is likely to find himself in a jungle. Interest rates and discounts trip him up; carrying charges, investigation fees, and hidden markups beset his path; delinquency fees and repossession clauses waylay him.

Few consumers even take the trouble to investigate. People who painstakingly shop around from store to store, compare thread count on sheets, or trade-in value on refrigerators or radios, often sign an instalment contract without reading half of it, let alone comparing costs of credit at available sources. The consumer, it is true, may have to hire himself a statistician to find out how much credit is going to cost him.

Downright frauds and shady deals are practiced by a minority of instalment dealers and sales finance companies. Entirely apart from these, however, there are two reasons why the consumer can hardly compare costs intelligently on instalment purchases.

Interest rates are often not given at all.

When they are given, they are



**16** seldom what they seem. Usually they are disguised as forms of the time-honored 6 percent. In the course of the years, 6 percent has come for many people to be synonymous with "fair return on investment," and with "credit." Says one merchant, "6 percent has sex appeal for the customer."

THE GOVERNOR'S COMMITTEE in Massachusetts checked on "6 percent" rates. In 105 cases in which "6 percent" was quoted, here are what the rates actually came to:

- 1 case came to 6 percent
- 6 cases were actually between 7 and 10 percent
- 61 cases amounted to between 11 and 20 percent
- 19 cases were between 21 and 30 percent
- 10 cases were really rates of between 31 and 100 percent
- 8 cases were between 101 and 679 percent.

**SLOGAN** of one group of consumers organized into a credit union—a cooperative "baby bank" for savings and loans—is "Shop for Your Credit—Then Shop with It." Credit unions finance many purchases of household equipment, sometimes automobiles, for their members.



CONSUMERS' GUIDE

Most automobile purchasers, the State Legislative Committee in Wisconsin found, thought they were paying between 8 and 12 percent for credit. The real rates, figured the committee, were between 17 and 40 percent, and in many transactions even higher.

Why can't customers tell rates for what they are? A study of 60 stores in one midwestern State showed 8 different ways in which instalment charges are given, or differentiated from cash prices:

- (1) A flat dollar-and-cents charge, with the system of determining the charge not disclosed; (2) a discount from the advertised or list price for cash payment, granted in some stores only if the customer demands it; (3) a flat percentage levied on the cash price before the down payment is deducted; (4) a percentage per year levied on the original unpaid balance; (5) a flat percentage, without relation to the length of the loan,

levied on the original unpaid balance; (6) a percentage per month on the actual unpaid balance outstanding each month; (7) "no charge" for instalment credit (this is much the same as the second method, except that cash discounts are not given even on request); (8) a combination of 2 or more of the above plans.

This listing, moreover, omits all the "incidental" charges and fees which may offer a bewildering variety of terms and amounts.

IS THERE ANY SIMPLE WAY for the consumer to chart his way through this jungle?

"Most consumers are ignorant of higher mathematics," observes the Massachusetts committee, "yet only through the use of rather complex formulas can instalment credit costs, as now stated, be reduced to a comparable basis." The only comparable basis—since time, size, and number of payments vary—is the rate of interest.

A leading personal finance company has prepared tables from which the consumer can, by the use of some arithmetic, figure out true interest rates on loans or instalment purchases. Quite understandably, the authors of this table would like consumers to compare their interest rates with real rather than fictitiously attractive carrying charges offered by lending institutions and instalment sellers whose ways of stating terms are not regulated by law.

For those with a taste for mathematical exercise, there are a couple of formulas by which one may compute interest rates on instalment purchases. Least difficult is a formula which gives the interest rate "correct for all practical purposes," when all the instalment payments are of equal amounts. Known as the "constant ratio" formula, it is:

$$\text{Rate per year} = \frac{2mI}{B(n+1)}$$

Here "m" is the number of payments in 1 year (for monthly payments "m" is 12; for weekly payments, 52); "I" is the total carrying charge, or interest, in dollars; "B" is the



unpaid balance at the beginning of the credit period (the *cash* price less the down payment); "*n*" is the number of payments, not counting the down payment.

This formula takes account of the fact that the amount of money which the customer is borrowing diminishes month by month, so that the average amount of which he has the use is about half the original balance.

A set of furniture, for example, sells for \$79, payable \$9 down, and \$10 a month for 7 months, with "no carrying charge." A cash customer can get the furniture for \$7 less, if he asks for the cash price. The cost of credit therefore is \$7. The unpaid balance, the cash price, \$72, less the down payment of \$9, is \$63. That is really the amount of money which the customer is borrowing at the outset. In this case,  $m=12$ ;  $I=7$ ;  $B=63$ ;  $n=7$ . Applying the formula above:

$$r = \frac{2 \times 12 \times 7}{63 \times (7 + 1)} = \frac{168}{504} = .333 = 33.3\%$$

The rate is, therefore, 33.3 percent a year.

An automobile dealer says: "Try our 6-percent plan on new cars." A customer likes a snappy new model at \$705. The dealer asks a down payment of \$235, and an insurance charge of \$30. He subtracts the down payment from the total cash price, then adds the cost of insurance. On this sum, the customer pays 6 percent for the privilege of making payment in 12 equal monthly instalments.

The unpaid balance of \$470, plus the \$30 insurance charge, is \$500, the principal on which the interest is figured. Six percent of that is \$30, which is the carrying charge. The rate then is:

$$\frac{2 \times 12 \times 30}{500 \times 13}$$

or slightly over 11 percent a year.

In comparing instalment charges with interest rates on various types of cash loans, one must remember to calculate interest on the money only while the borrower has its use. The true interest rate, for example, on

a personal finance company loan at 3½ percent a month on the unpaid balance, comes to 42 percent a year. But on a \$100 loan, repayable in 12 monthly instalments, the borrower will not pay \$42 interest; he will pay \$22.75.

On a credit union loan, to take another example, with interest at 1 percent per month on the unpaid balance (a true rate of 12 percent a year), the year's interest would come to \$12 only if the member waited until the end of the year and then repaid the \$100 in a lump sum. But if he pays it back in equal monthly instalments, total interest for the 12 months will amount to \$6.50.

For rough calculations, if repayment is by equal instalments, figure the use of the total sum of money for half the total time.

ONLY the borrower himself can decide whether credit is *too expensive*. A rate which appears high in terms of interest per month or interest per year, may not be too much for the borrower to pay for the immediate use of something he needs or wants. If a man does not have the \$10 cash price of a tire, he may be willing to pay \$1 down, and the balance, plus interest of 10 percent of the full cash price, in 10 weekly instalments. Interest here, because of the short period the loan runs, comes to 104 percent a year. If the alternative is leaving his car idle for 10 weeks, the customer may find this a reasonable credit charge.

Let us follow the consumer as he goes out to shop, let us say for a refrigerator—and for credit.

At one store, the refrigerator he selects may sell for \$100, with a \$10 down payment, and the rest in "easy payments" of \$10 a month, with a bookkeeping charge of \$3, and an interest charge of "6 percent." That, it turns out, means \$6 deducted in advance. But if he has to pay \$10 down on his merchandise, the consumer has the use of only \$90, not \$100, and that only for a single month, until he puts down another \$10 payment. For the succeeding month, he is getting the use of only

\$80. By the last month he has the use of only \$10.

Six percent of what, says the shopper? The rate on this deal, computed by the "constant ratio" formula, actually comes to 24 percent a year.

At another store, what seems like the best refrigerator buy for his needs is priced at \$110 with "no carrying charges." Taking his courage in hand, the consumer inquires about a cash price. He discovers that if cash is paid, the refrigerator can be had for \$99—with several gadgets, figured at \$4.25 retail value, thrown in.

At a third store, the easy-payment-plan is easier. No money down, and the customer has 20 months in which to pay. The only carrying charge, apparently, is a 50-cent fee per payment. There is a "nominal" insurance fee. Oh, yes, the refrigerator is priced at \$107.50.

By this time, the consumer may be a little worried. He wants to know how much he is paying, not only for the refrigerator, but for credit. It is hard enough to calculate the interest rates for purposes of comparison.

BUT PRICE is not the only item in an instalment contract. When the buyer has figured out what the merchandise is going to cost him, and how much he is going to pay for credit, there are still other terms and charges to compare.

What penalty fees is he liable to?

What repossession rights does the seller, or the finance company, have?

Exactly to whom does he owe the money?

What security must the customer give?

Is he turning over to the seller the right to collect his salary if he lapses in payment?

Is there any rebate for payment in less time than the contract requires?

These are some of the questions the instalment purchaser wants to ask himself and the dealer. Next *Guide* article in this series on credit for consumers will take up the terms of the instalment contract.



## How Consumer Cooperatives Start

### CASE NUMBER ONE

1. Study group of about ten people in one neighborhood meet evenings.
2. They pool orders for staple groceries, later include fruits and vegetables, too, and distribute the goods from the basement of one of the members.
3. A buying club is formally organized. Shares are sold.
4. A full-time store is opened.

### CASE NUMBER TWO

1. Luncheon group, composed chiefly of members of consumer cooperatives, meets weekly to consider cooperative problems.
2. Survey and discussion reveal gas and oil cooperative as next field for cooperative activity for city.
3. Single pump is leased at private operator's station.
4. Building up of reserves from gains of pump operation; sale of additional shares.
5. Gas and oil station opened.

### CASE NUMBER THREE

1. A farm supply purchasing and grain marketing cooperative is operating in a rural county.
2. Discussion groups of the co-op's members study consumer problems, urge their cooperative to handle groceries and other consumer goods.
3. Staple groceries stocked in back room of office headquarters of the cooperative.
4. Shares are sold in a cooperative grocery.
5. Full-time grocery store is opened.

### CASE NUMBER FOUR

1. Farmers' families at outing hear

talk on medical care as consumer problem.

2. Committee, including farm organization leaders, county agent, home demonstration agent, State university teachers in colleges of agriculture and medicine, is set up to study medical and dental care needs of the area.

3. Discussion group, inspired by the committee, studies possibilities of cooperative provision of medical care.

4. Meeting votes to set up medical cooperative. Doctors and hospitals are contacted and arrangements made for several to come in on the plan.

5. Cooperative health association sells membership certificates; starts collecting year's dues from families; begins offering medical care and hospitalization on fixed-fee, prepayment basis.

COOPERATION between cooperatives, both city and farm, between organized consumers and producers, is reported by the Cooperative Trading Company, of Waukegan, Illinois:

"Just glance at the commodities which we, as organized consumers, are getting direct from the producers . . .

"Our potatoes and fish come largely from producer co-ops in Michigan. Our eggs and milk come direct from farmers in Illinois and Wisconsin. Most of our peaches, grapes, strawberries, and apples are bought direct from Michigan truck farmers.

"Our canned milk comes from a producer co-op in Indiana, and much of our canned vegetables and fruits come straight from those who raise and pack them. Our coffee comes direct from cooperative wholesale roasteries. Some of our flour comes from a farmers' mill in Indiana.

"Our gasoline and oil products come

from a cooperative organization. Much of our poultry and meats is bought direct from the growers."

COOPERATIVE PURCHASING by farmers is on the increase. So is cooperative marketing. But farmers are stepping up their joint buying even faster than their cooperative selling, according to 2 Government studies.

Seventeen out of 100 American farmers report purchasing some of their needs the cooperative way in 1938—as compared with 7 out of 100 in 1930—according to a special survey of 3,000 farms in 40 States by the Census Bureau and the Department of Agriculture. Cooperative marketing was reported by 11 percent of the farmers in 1930; by 15 percent of the farmers this year. The number of farm owners who do cooperative buying doubled over the 8 years. For farm tenants, it more than tripled.

Half a million farmers buy 110 million dollars' worth of gas, oil, and other petroleum products a year through their consumer cooperatives, reports the Farm Credit Administration after a "door-to-door" survey of 15,500 associations by its 12 Banks for Cooperatives. The survey covered 1936 operations.

Over 3 million farmers—almost half of the whole number in the United States—either market some of their products through cooperatives, or buy at least part of their supplies, farm business services or insurance through co-ops.

Gross sales of 10,752 marketing and purchasing societies came to \$2,715,000,000. Of this total, \$2,280,000,000 represented sales of farm products; 435 million dollars, cooperative purchasing by farmers.



## SHOPPING FOR PAINT

[Continued from Page 6]

out, a coating consisting wholly of white lead on woods that hold paint well will still go through a long period of neglect during which it looks shabby but not unkempt. After such neglect, a white lead surface can easily be repainted without undue expense. Paint of type L is recommended also for houses in which moisture at times collects behind the painted woodwork. The coating will blister as readily as other paints but, if the coating consists entirely of white lead paint, the blisters usually disappear when the wood dries out without leading to a subsequent peeling and scaling.

*Type TL*, high content of white lead. The pigment consists of titanium pigment and white lead, with no zinc oxide. This makes a very soft paint that behaves in many respects like paint of Type L.

*Type TLZ*, high content of white lead, medium content of zinc oxide.

*Type TLZ*, high content of white lead, low content of zinc oxide, plus titanium.

*Type TLZ*, medium content of white lead, medium content of zinc oxide, plus titanium.

*Type TLZ*, medium content of white lead, low content of zinc oxide.

*Type TLZ*, low content of white lead, medium content of zinc oxide.

The pigment in these five types of paint is a mixture of titanium pigment, white lead, and zinc oxide, in the relative proportions indicated. The white paint in the "first grade" brand of most manufacturers of prepared paint is now of one of these types. The TLZ paints remain cleaner and whiter through a greater part of their useful life than paints of other types. When tinted, however, the color begins to fade fairly early. When painting is done consistently with any one type of TLZ paint, coatings of excellent durability that remain free from checking or cracking for a relatively long time are

obtained. However, if repainting is delayed too long, conspicuous cracking and eventually curling and scaling develop which leave a difficult and uncertain surface for repainting. Paint jobs ordinarily should be spaced at 4 to 5 year intervals.

*Type TZ*, medium content of zinc oxide: The pigment consists of titanium pigment and zinc oxide, with no white lead. Paints of TZ type remain cleaner than any other house paints on the market. When applied under unfavorable conditions such as painting in unseasonable weather, they are less reliable in behavior than paints containing white lead. For use in localities where there is hydrogen sulfide in the air the TZ paints are advantageous because white lead blackens under these conditions.

*Type LZ*, very high content of white lead, high content of zinc oxide.

*Type LZ*, very high content of white lead, medium content of zinc oxide.

*Type LZ*, very high content of white lead, low content of zinc oxide.

*Type LZ*, high content of white lead, high content of zinc oxide.

*Type LZ*, high content of white lead, medium content of zinc oxide.

The pigment contains white lead and zinc oxide, with or without transparent pigments. Paints of the LZ types are apparently becoming obsolete as white prepared paints but they are still very widely used for tinted paints because they are thought to retain the original color somewhat longer than other paints. The relative seriousness of fading and soiling with dirt is largely a matter of individual preference.

Zinc sulfide pigments are used in many house paints but nearly all of them are manufacturers' second- or third-grade paints. On the other hand the great majority of cheap white and tinted paints contain lithopone or other zinc sulfide pigments. Though technical men may disagree about the suitability of zinc sulfide pigments for making

high-grade house paints, consumers may well assume that any house paint containing such pigments is not of the best quality. The zinc sulfide pigments, however, are entirely suitable for high-grade interior paints, particularly wall paints. They are widely used for this purpose.

APPLIED PROPERLY and given reasonable care, all of the paints listed here will give good service for specific purposes if made well. A paint surface, however, isn't quite so imperishable as the memory of a good woman. Periodically it must be renewed. When it is renewed it should be renewed with the same type of paint originally used. There are some exceptions to the rule, but consumers should make the exceptions only when their own experience has shown that one kind of paint goes over another kind of paint satisfactorily. To make sure that they do not waste their money, consumers should make a note of the formulas of the paints they use so that when they go buying again they can purchase the same kind of paint.

Experts in the United States Forest Service who have studied more than 500 cases of unsatisfactory paint service within the last few years learned that most paint failures that are caused by faulty application or maintenance come from (1) the painter's ignorance of the kind of paint he is using, (2) the failure to space painting in accordance with the kind of paint used, and (3) from using different kinds of paint for successive paint jobs.

CAREFUL STUDY of paint formulas on paint cans, and the keeping of careful records as to the date of each paint job and kind of paint used can help consumers reduce these failures.

Consumers, however, will find their problems greatly simplified when a simple and practical method of classifying and grading paints is adopted by paint manufacturers.

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